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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/067,337

02/07/2002

Naoki Kimura

Q67362

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03/03/2004

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EXAMINER

PAK, SUNG H

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 03/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

in

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/067,337	KIMURA, NAOKI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sung H. Pak	2874	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 November 2003.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-50 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-50 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 07 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1003</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant's amendment filed 11/07/2003 has been entered. All pending claims have been carefully reconsidered by the examiner. In view of the amended limitations on independent claims 1, 18, 26, 32, 38 and 44, a new ground of rejection is furnished in this office action. On unamended claims 11-17 the previous ground of rejection is upheld in this office action. Please refer to Remarks for further discussion.

### ***Information Disclosure Statement***

The information disclosure statement filed 10/27/2003 has been entered and all the listed references have been considered. Please refer to the initialed copy of PTO/SB/08 enclosed herewith.

### ***Drawings***

The drawings filed 2/7/2002 have been accepted by the examiner.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10, 26-37 are rejected under 35 U.S.C. 102(b) as being anticipated by DiDomenico, Jr. et al (US 4,165,496).

DiDomenico reference discloses an optical device with all the limitations set forth in the claims, including: light emitting means for emitting signal light (Fig. 1); optical transmitting means for transmitting the signal light surround by a clad layer ("50", "53" Fig. 5); light monitoring means for receiving forward light emitted from the light emitting means, which is provided on the clad layer ("54" Fig. 5), and supporting means for supporting the light emitting means and the optical transmitting means (Fig. 6). Although the light source is not explicitly shown in Fig. 6, it is inherently disclosed by the disclosure of the reference.

Further, the reference discloses: the light monitoring means being provided on the opposite side of the clad layer from the supporting means (Fig. 5-6); wherein the forward light is a portion of leakage light that is not coupled to the optical transmitting means (Fig. 1); wherein the optical transmitting means is an optical waveguide (abstract); reflecting means disposed between the optical waveguide and the support means (Fig. 1, Fig. 6); wherein the light monitoring means receives leakage light reflected by the reflecting means (Fig. 1); wherein the optical transmitting means is an optical fiber (abstract); positioning means for positioning the optical fiber so that the signal light emitted from the light emitting means can be optically coupled to the optical fiber (Fig. 6); wherein the light monitoring means is disposed so that it cannot contact the optical fiber (Fig. 5); wherein the current generated by the light monitoring means is used to control the signal light output from the light emitting means (Fig. 2).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18-25, 38-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over DiDomenico, Jr. et al (US 4,165,496) in view of Fukutomi (US 2001/0033716 A1).

Fukutomi reference was cited in the previous office action.

DiDomenico reference discloses an optical device with all the limitations set forth in the claims as discussed above, except it does not teach the use of a second light guiding means for guiding second light signal input into the module, and a filtering means for allowing transmission of a predetermined signal light.

Fukutomi reference, on the other hand, explicitly teaches the use of a second light guiding means for guiding second light signal input into the module, and a filtering means for allowing transmission of a predetermined signal light. Second light guiding means and filtering means, as disclosed in Fukutomi, are advantageous and desirable because it allows for bi-directional, wavelength specific optical signal transmission. Such devices are desirable for robust optical communications applications. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify DiDomenico device to have second light guiding means and filtering means.

Claims 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukutomi (US 2001/0033716 A1) in view of Zhou (US 6,081,638) as discussed in the prior office action.

Fukutomi discloses an optical device with all the limitations set forth in the claims, except it does not teach the use of a light monitoring means for receiving forward light emitted from the first light emitting means.

Specifically, Fukutomi discloses: An optical semiconductor module comprising: a light emitting means for emitting first signal light (Fig. 3) ; first guiding means for guiding said first signal light (Fig. 3); light monitoring means for receiving light emitted from said first light emitting means ("11" Fig. 3); second guiding means for guiding a second signal light input into said optical semiconductor module (Fig. 3); filtering means for allowing transmission of a predetermined signal light (Fig. 2a); and support means for supporting said light emitting means (Fig. 2a, Fig. 3).

Fukutomi, however, teaches the use of a light monitoring means that detects the backward emitted light. Zhou, on the other hand, teaches the use of a monitoring means that detects the forward emitted light as claim in this application (discussed above). Zhou teaches that such an arrangement is advantageous over the prior art backward emitted light detection (Fig. 1), because it allows for a more accurate measurement of optical power (column 2 lines 4-55). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to

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modify Fukutomi device to have a light monitoring means that detect forward emitted light as claimed in the instant application.

### ***Remarks***

Rejection of claims 11-17 on previous ground of rejection:

Starting on page 16 of the applicant's response, it is argued that "the proposed combination of Zhou and Fukutomi does not teach or suggest all of the requirements of these claims." Specifically, it is argued that Fukutomi discloses an optical device having a monitor for monitoring backward light.

The examiner respectfully points out that, while it is true that Fukutomi reference, *taken alone*, does not disclose a monitoring means for receiving a forward light. The claimed limitations are obvious over Fukutomi reference *in view of* Zhou reference, wherein Zhou reference discloses an arrangement for monitoring forward light. The motivation for modifying a prior art "backward light monitoring arrangement" to Zhou's "forward light monitoring arrangement" is clearly articulated in the Zhou reference. Therefore, the claim rejection based on 35 USC 103(a) over Fukutomi in view of Zhou is still valid.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sung H. Pak whose telephone number is (571) 272-2353. The examiner can normally be reached on Monday - Thursday : 6:30am-5:00pm.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.




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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sung H. Pak  
Examiner  
Art Unit 2874

sp



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